

## **REMARKS**

Claims 1, 2, 4-8, 11-23, 25, 27, 28, 30 and 31 are pending in the subject application. Claims 3, 9, 10, 24, 26, 29 and 31-46 are cancelled.

Claim 1 is amended to recite the secondary pore diameter. Support for this amendment may be found at least on pages 9, lines 30+, of the subject specification.

In response to the Restriction Requirement, Applicants hereby elect the invention of Group I, i.e., claims 1-14, for prosecution in the above-identified patent application. In addition, Applicants' hereby elect species set forth in Figures 4-12, represented by claims 1-14. This Election is made with traverse. In the Office Action, the basis for restricting the claims of Groups I-IV is as follows:

The inventions listed as Groups I-IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: claim 1 is either anticipated by or obvious over US 5384047. US '047 discloses a filter body comprised of molecular sieve material (porous functional solid) and polyphenylene sulfide (polymer matrix) [abstract]. The weight percent of three molecular sieve materials reads on claimed range [col. 4, 11. 4-9], also read on primary and secondary pore volumes. Hence, the recited material lacks novelty or inventive step, and does not make a contribution over the prior art. The unity of invention is lacking and restriction is appropriate.

MPEP §93.03 (d) recites the following regarding unity of invention determination under PCT Rule 13:

When making a lack of unity of invention requirement, the examiner must (1) list the different groups of claims and (2) explain why each group lacks unity with each other group (i.e., why there is no single general inventive concept) specifically describing the unique special technical feature in each group.

The principles of unity of invention are used to determine the types of claimed subject matter and the combinations of claims to different categories of invention that are permitted to be included in a single international or national stage patent application. See MPEP §1850 for a detailed discussion of Unity of Invention. The basic principle is that an application should relate to only one invention or, if there is more than one invention, that applicant would have a right to include in a single application only those inventions which are so linked as to form a single general inventive concept.

A group of inventions is considered linked to form a single general inventive concept where there is a technical relationship among the inventions that involves at least one common or corresponding special technical feature. The expression special technical features is defined as meaning those technical features that define the contribution which each claimed invention, considered as a whole, makes over the prior art. For example, a corresponding technical feature is exemplified by a key defined by certain claimed structural characteristics, which correspond to the claimed features of a lock to be used with the claimed key. Note also the examples contained in Chapter 10 of the International Search and Preliminary Examination Guidelines which can be obtained from WIPO's web site ([www.wipo.int/pct/en/texts/gdlines/htm](http://www.wipo.int/pct/en/texts/gdlines/htm)).

Chapter 10 of the PCT Rules states the following regarding determination of unity of invention.

10.02 Whether or not any particular technical feature makes a "contribution" over the prior art, and therefore constitutes a "special technical feature," is considered with respect to novelty and inventive step. For example, a document discovered in the international search shows that there is a presumption of lack of novelty or inventive step in a main claim, so that there may be no technical relationship left over the prior art among the claimed inventions involving one or more of the same or corresponding special technical features, leaving two or more dependent claims without a single general inventive concept.

In the present case, subject claim 1 recites a secondary pore diameter, which is not disclosed in the cited reference, US Patent No. 5,384,047 (hereinafter referred to as '047). The '047 patent discloses a filter body

comprised of at least about 75 wt. % of molecular sieve material and from about 9 to about 20 wt.% of polyphenylene sulfide. All pores of said molecular sieve are smaller than about 4 Angstroms. This pore size definition relates to the primary pore volume. In the '047 patent no figures are given for the secondary pore structure. Nevertheless, there are statements in the '047 patent about pore structure, namely in example 1 column 11, lines 20 to 23, where a pressure drop over a shaped body is discussed. This corresponds to a quite open secondary pore structure with large macroscopic pores allowing substantial amounts of fluid traveling through. This observation is supported by claim 14 in column 14, lines 7 to 11, describing bodies with surprisingly low densities as low as  $0,61 \text{ g/cm}^3$ . Where a porous body possesses a density below  $1\text{g/cm}^3$ , a macro pore structure is present allowing readable pressure drops over such bodies.

In comparison, a porous body possessing a meso porous structure does not allow for passage of fluid or gas through the material. The presently disclosed bodies in present claim 1 gives clear information about its secondary pore structures. The corresponding bodies would have an unlimited pressure drop.

The '047 patent postulates in claim 1 particle sizes of the molecular sieves between 100 and 2000  $\mu\text{m}$ . Since large particle sizes lead to large voids between arrangements of particles also this supports the presence of large macro-porous secondary pore structures in the '047 patent material, i.e., of channels allowing a fluid to pass through the structure without considerable pressure drop.

In contrast to this, the presently claimed materials have only a secondary pore volume with pore diameters of 4 to 3000  $\mu\text{m}$ , i.e., only small interstices, allowing dense bodies. However, there is no disclosure in the '047 patent in this respect.

Thus, the subject-matter of claim 1 is novel versus the disclosure of the '047 patent.

Chapter 10 of the PCT Rules further recites examples having unity of invention including the following :

10.20 The application of the principles of unity of invention is illustrated by the following examples for guidance in particular cases.

*Claims in Different Categories*

10.21 *Example 1*

*Claim 1: A method of manufacturing chemical substance X.*

*Claim 2: Substance X.*

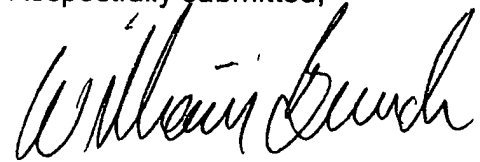
*Claim 3: The (method of) use of substance X as an insecticide.*

Unity exists between claims 1, 2 and 3. The special technical feature common to all the claims is substance X. However, if substance X is known in the art, unity would be lacking because there would not be a special technical feature common to all the claims.

In the present claims, Group I relates to an adsorbing material having a certain secondary pore diameter and a shaped article including the adsorbing material having a certain secondary pore diameter. Group II relates to a method of making a shaped article of Group I having a certain secondary pore diameter. As indicated above, the adsorbing material is novel, and inventive over '047, and is the special technical feature common to both Groups, and thus, restriction of Groups I and II is impermissible under PCT Rule 13. Applicants respectfully request withdrawal of the restriction requirement.

In the event that further information is required, please contact the undersigned at (410) 531 4333.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "William D. Bunch". The signature is fluid and cursive, with the first name "William" being more prominent than the last name "Bunch".

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**Notice of Non-Compliant Amendment  
(37 CFR 1.121)**

Application No.  
10/500,349

Applicant(s)  
FRITZ ET AL.

Art Unit  
1700

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

The amendment document filed on 08 November, 2007 is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121 or 1.4. In order for the amendment document to be compliant, correction of the following item(s) is required.

THE FOLLOWING MARKED (X) ITEM(S) CAUSE THE AMENDMENT DOCUMENT TO BE NON-COMPLIANT:

- ☐ 1. Amendments to the specification:
  - ☐ A. Amended paragraph(s) do not include markings.
  - ☐ B. New paragraph(s) should not be underlined.
  - ☐ C. Other
- ☐ 2. Abstract:
  - ☐ A. Not presented on a separate sheet. 37 CFR 1.72.
  - ☐ B. Other
- ☐ 3. Amendments to the drawings:
  - ☐ A. The drawings are not properly identified in the top margin as "Replacement Sheet," "New Sheet," or "Annotated Sheet" as required by 37 CFR 1.121(d).
  - ☐ B. The practice of submitting proposed drawing correction has been eliminated. Replacement drawings showing amended figures, without markings, in compliance with 37 CFR 1.84 are required.
  - ☐ C. Other
- ☒ 4. Amendments to the claims:
  - ☐ A. A complete listing of all of the claims is not present.
  - ☐ B. The listing of claims does not include the text of all pending claims (including withdrawn claims)
  - ☒ C. Each claim has not been provided with the proper status identifier, and as such, the individual status of each claim cannot be identified. Note: the status of every claim must be indicated after its claim number by using one of the following status identifiers: (Original), (Currently amended), (Canceled), (Previously presented), (New), (Not entered), (Withdrawn) and (Withdrawn-currently amended).
  - ☐ D. The claims of this amendment paper have not been presented in ascending numerical order.
  - ☒ E. Other: *Original claims should not have markings.*
- ☐ 5. Other (e.g., the amendment is unsigned or not signed in accordance with 37 CFR 1.4): For further explanation of the amendment format required by 37 CFR 1.121, see MPEP § 714.

**TIME PERIODS FOR FILING A REPLY TO THIS NOTICE:**

1. Applicant is given **no new time period** if the non-compliant amendment is an after-final amendment or an amendment filed after allowance, or a drawing submission (only). If applicant wishes to resubmit the non-compliant after-final amendment with corrections, the **entire corrected amendment** must be resubmitted.
2. Applicant is given **one month**, or thirty (30) days, whichever is longer, from the mail date of this notice to supply the correction, if the non-compliant amendment is one of the following: a preliminary amendment, a non-final amendment (including a submission for a request for continued examination (RCE) under 37 CFR 1.114), a supplemental amendment filed within a suspension period under 37 CFR 1.103(a) or (c), and an amendment filed in response to a Quayle action. If any of above boxes 1 to 4 are checked, the correction required is only the corrected section of the non-compliant amendment in compliance with 37 CFR 1.121.

**Extensions of time** are available under 37 CFR 1.136(a) only if the non-compliant amendment is a non-final amendment or an amendment filed in response to a Quayle action.

**Failure to timely respond** to this notice will result in:

**Abandonment** of the application if the non-compliant amendment is a non-final amendment or an amendment filed in response to a Quayle action; or

**Non-entry** of the amendment if the non-compliant amendment is a preliminary amendment or supplemental amendment.

Legal Instruments Examiner (LIE), if applicable Felicia Allen-Jenkins

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